IN THE CLAIMS:

1-30. (Canceled)

31. (Previously Presented): A method for maintaining order between multiple command queues with different ordering requirements, the method comprising:

receiving a command at a unit pipeline in a multi-queue system, wherein the multi-queue system has a plurality of command queues comprising a strict order queue and a stack down order queue;

directing the command to a corresponding command queue within the plurality of command queues;

entering the command into the corresponding command queue as a command entry, wherein the command entry comprises a command portion, a validation bit portion, and a set of dependency bits;

upon entering the command into the corresponding command queue, taking a snapshot of an opposing command queue within the plurality of command queues; and

setting the validation bit portion and the set of dependency bits in the command entry based on the snapshot of the opposing command queue.

32. (Previously Presented): The method of claim 31, wherein the corresponding command queue is the strict order queue.

33. (Previously Presented): The method of claim 32, the method further comprising:

entering the command entry into the strict order queue in a location indicated by a newest entry pointer.

34. (Previously Presented): The method of claim 31, wherein the corresponding command queue is the stack down order queue.

35. (Previously Presented): The method of claim 31, further comprising:

determining a next command to execute from the plurality of command queues;

executing the next command;

generating a retire signal; and

updating the validation bit portion and the set of dependency bits of remaining command entries within the plurality of command queues based on the retire signal.

36. (Previously Presented): The method of claim 35, wherein the retire signal further comprises command identification.

37. (Previously Presented): The method of claim 36, wherein updating the validation bit portion and the set of dependency bits of a given remaining command entry comprises:

clearing any dependencies on the executed next command in the set of dependency bits in the given remaining command entry.

38. (Previously Presented): A multi-queue system, comprising:

a plurality of command queues comprising a strict order queue and a stack down order queue;

a unit pipeline for receiving a command;

means for directing the command to a corresponding command queue within the plurality of command queues;

means for entering the command into the corresponding command queue as a command entry, wherein the command entry comprises a command portion, a validation bit portion, and a set of dependency bits;

means for taking a snapshot, upon entering the command into the corresponding command queue, of an opposing command queue within the plurality of command queues; and

means for setting the validation bit portion and the set of dependency bits in the command entry based on the snapshot of the opposing command queue.

39. (Previously Presented): The multi-queue system of claim 38, wherein the corresponding command queue is the strict order queue.

40. (Previously Presented): The multi-queue system of claim 39, further comprising:

means for entering the command entry into the strict order queue in a location indicated by a newest entry pointer.

41. (Previously Presented): The multi-queue system of claim 38, wherein the corresponding command queue is the stack down order queue.

42. (Previously Presented): The multi-queue system of claim 38, further comprising:

means for determining a next command to execute from the plurality of command queues;

means for executing the next command;

means for generating a retire signal; and

means for updating the validation bit portion and the set of dependency bits of remaining command entries within the plurality of command queues based on the retire signal.

43. (Previously Presented): The multi-queue system of claim 42, wherein the retire signal further comprises command identification.

44. (Previously Presented): The multi-queue system of claim 43, wherein the means for updating the validation bit portion and the set of dependency bits of a given remaining command entry comprises means for clearing any dependencies on the executed next command in the set of dependency bits in the given remaining command entry.